

**IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/581,131
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Title: HIGH INTENSITY DISCHARGE LAMP ASSEMBLY

APPEAL BRIEF

U.S. Patent and Trademark Office
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Commissioner for Patents
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Sir:

In response to the FINAL Office Action dated 13 October 2009 and the Advisory Action dated 11 January 2010, finally rejecting pending claims 1-6 and 8-13, and in support of the Notice of Appeal filed on 13 January 2010, Applicant hereby respectfully submits this Appeal Brief.

REAL PARTY IN INTEREST

Koninklijke Philips Electronics N.V. owns all of the rights in the above-identified U.S. patent application by virtue of an assignment recorded at reel 017959, frame 0494.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences related to this application or to any

related application, nor will the disposition of this case affect, or be affected by, any other application directly or indirectly.

STATUS OF CLAIMS

Claim 7 is canceled.

Claims 1-6 and 8-13 are pending in the application.

Claims 1-6 and 8-13 all stand rejected.

Accordingly, the claims on appeal are claims 1-6 and 8-13.

STATUS OF AMENDMENTS

There are no pending amendments with respect to this application.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a high intensity discharge lamp assembly.¹

Accordingly, as broadly recited in claim 1, a high-pressure discharge lamp assembly comprises: a discharge lamp (FIGs. 1-3A – element 1; page 4, line 18) and a concave reflector (FIGs. 1-3 A – element 11; page 4, line 18) arranged around a longitudinal axis (FIGs. 1-3A – element 30; page 4, lines 18-19), the discharge lamp being closed in a gastight manner (page 4, line 24) and comprising a first end portion (FIGs. 1-3A – element 3; page 4, line 25) and a second end portion (FIGs. 1-3A – element 4; page 4, line 25) and an ionizable gas filling (page 4, lines 25-27), and in which a pair of electrodes (FIGs. 1-3A – elements 5 & 6; page 4, line 30) is arranged, wherein the first end portion of the discharge lamp extends through an opening (FIGs. 1-3A – element 14; page 5, lines 4-5) provided in a center section of the reflector, a first current-supply conductor (FIGs. 1-3A – element 7; page 5, line 2)

¹ In the description to follow, citations to various reference numerals, figures, and corresponding text in the specification are provided solely to comply with Patent Office rules. It should be understood that these reference numerals, figures, and text are exemplary in nature, and not in any way limiting of the true scope of the claims. It would therefore be improper to import anything into any of the claims simply on the basis of **exemplary** language that is provided here only under the obligation to satisfy Patent Office rules for maintaining an Appeal.

connected to a first one of the pair of electrodes and issuing to an exterior of the discharge lamp at the first end portion of the discharge lamp (page 5, lines 2-3); a second current-supply conductor (FIGs. 1-3A – element 8; page 5, lines 2-3) connected to a second one of the pair of electrodes and issuing to the exterior of the discharge lamp at the second end portion of the discharge lamp (page 5, lines 2-3); a conduction member (FIGs. 1-3A – element 9; page 5, lines 5-7) connected to the second current-supply conductor and extending through the opening in the center section of the reflector, and a contact member (FIGs. 1-3A – element 10; page 5, lines 8-9) provided on a surface of the reflector facing away from the discharge lamp the contact member being connected to the conduction member, wherein the discharge lamp is mounted in a fixation means (FIGs. 1 & 3A – elements 25 & 25A; page 5, lines 24-25, page 6, lines 6 & 19) provided in the opening of the reflector.

As broadly recited in claim 12, a high-pressure discharge lamp assembly comprises: a discharge lamp (FIGs. 1-3A – element 1; page 4, line 18) and a concave reflector (FIGs. 1-3A – element 11; page 4, line 18) arranged around a longitudinal axis (FIGs. 1-3A – element 30; page 4, lines 18-19); the discharge lamp being closed in a gastight manner (page 4, line 24) and comprising a first end portion (FIGs. 1-3A – element 3; page 4, line 25) and a second end portion (FIGs. 1-3A – element 4; page 4, line 25) and an ionizable gas filling (page 4, lines 25-27), and in which a pair of electrodes (FIGs. 1-3A – elements 5 & 6; page 4, line 30) is arranged, wherein the first end portion of the discharge lamp extends through an opening FIGs. 1-3A – element 14; page 5, lines 4-5) provided in a center section of the reflector; a first current-supply conductor (FIGs. 1-3A – element 7; page 5, line 2) connected to a first one of the pair of electrodes and issuing to an exterior of the discharge lamp at the first end portion of the discharge lamp (page 5, lines 2-3); a second current-supply conductor (FIGs. 1-3A – element 8; page 5, lines 2-3) connected to a second one of the pair of electrodes and issuing to the exterior of the discharge lamp at the second end portion of the discharge lamp (page 5, lines 2-3); a conduction member (FIGs. 1-3A – element 9; page 5, lines 5-7) connected to the second current-supply conductor and extending through the opening in the center section of the reflector; and a contact member (FIGs. 1-3A – elements 10, 10A and 10B; page 5, lines 8-9;

page 6, lines 4-5 & 13-14) provided on a surface of the reflector facing away from the discharge lamp, the contact member being connected to the conduction member, wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector (FIGs. 1 & 3A – elements 25 & 25A; page 5, lines 24-25, page 6, lines 6 & 19), and wherein the conduction member is guided through the fixation means (page 5, lines 25-26).

As broadly recited in claim 13, a high-pressure discharge lamp assembly, comprises: a discharge lamp (FIGs. 1-3A – element 1; page 4, line 18) and a concave reflector (FIGs. 1-3A – element 11; page 4, line 18) arranged around a longitudinal axis (FIGs. 1-3A – element 30; page 4, lines 18-19); the discharge lamp being closed in a gastight manner (page 4, line 24) and comprising a first end portion (FIGs. 1-3A – element 3; page 4, line 25) and a second end portion (FIGs. 1-3A – element 4; page 4, line 25) and an ionizable gas filling (page 4, lines 25-27), and in which a pair of electrodes (FIGs. 1-3B – elements 5 & 6; page 4, line 30) is arranged, wherein the first end portion of the discharge lamp extends through an opening (FIGs. 1-3A – element 14; page 5, lines 4-5) provided in a center section of the reflector; a first current-supply conductor (FIGs. 1-3A – element 7; page 5, line 2) connected to a first one of the pair of electrodes and issuing to an exterior of the discharge lamp at the first end portion of the discharge lamp (page 5, lines 2-3); a second current-supply conductor (FIGs. 1-3A – element 8; page 5, lines 2-3) connected to a second one of the pair of electrodes and issuing to the exterior of the discharge lamp at the second end portion of the discharge lamp (page 5, lines 2-3); a conduction member (FIGs. 1-3A – element 9; page 5, lines 5-7) connected to the second current-supply conductor and extending through the opening in the center section of the reflector; a first contact member (FIG. 1 – element 10; page 5, lines 8-9) provided as a first circular conducting strip around the reflector on a surface of the reflector facing away from the discharge lamp (page 5, lines 12-13), the first contact member being connected to the conduction member (page 5, line 8); and a second contact member (FIG. 1 – element 20; page 5, lines 19-20) provided as a second circular conducting strip around the reflector on the surface of the reflector facing away from the discharge lamp (page 5, lines 21-22), the second contact member

being connected to the first current-supply conductor (page 5, line 20-21), wherein the discharge lamp is mounted in a fixation means (FIGs. 1 & 3A – elements 25 & 25A; page 5, lines 24-25, page 6, lines 6 & 19) provided in the opening of the reflector.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on Appeal are: (1) the rejections of claims 1-3, 6 and 8-12 under 35 U.S.C. § 103 over Marlen et al. U.S. Patent 5,698,936 (“Marlen”); and (2) the rejections of claims 4, 5 and 13 under 35 U.S.C. § 103 over Marlen in view of Kika WO/2003/022013 (“Kika”).

ARGUMENTS

(1) Claims 1-3, 6 and 8-12 are Patentable over Marlen

Independent Claim 1

Among other things, the high pressure discharge lamp assembly of claim 1 includes a discharge lamp and a concave reflector, wherein the first end portion of the discharge lamp extends through an opening provided in a center section of the reflector, and wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector.

Applicant respectfully submits that Marlen neither discloses nor suggests any high pressure discharge lamp assembly including this combination of features.

The Examiner states that Marlen discloses discharge vessel 30 “*extends through an opening (between 4 and 5) provided in a center section of the reflector 1.*” The Examiner also cites plate 25 and cement 27 as supposedly corresponding to the fixation means of claim 1.

Applicant respectfully disagrees.

In Marlen, the area of reflector 1 extending downward from the bottom area of contact between reflector 1 and beam-forming portion 4 is the neck 5. The area that is apparently being referred to by the Examiner as supposedly corresponding to the recited opening in the reflector of claim 1 is actually the interior of neck 5. In actuality, Marlen discloses that the reflector 1 has an opening 8 at an opposite end of

neck 5 (see, e.g., col. 3, lines 65-67). It is apparent that Marien's discharge vessel 30 does not extend through the opening 8 in the neck 5 of reflector 1.

So Applicant respectfully submits that Marien does not disclose or suggest the high pressure discharge lamp assembly of claim 1.

So, for at least the reasons above, Marien does not teach or suggest at least one feature of claim 1. Therefore, a *prima facie* case of obviousness has not been established, and claim 1 is patentable over the applied art. Accordingly, Applicant requests that the rejection of claim 1 be withdrawn.

Dependent Claims 2-6, 8-11

Claims 2-3, 6, and 8-11 depend from claim 1 and are deemed patentable for at least the reasons set forth above with respect to claim 1. Accordingly, Applicant respectfully requests that the rejections of claims 2-3, 6, and 8-11 be withdrawn.

Independent Claim 12

Among other things, the high pressure discharge lamp assembly of claim 12 includes a discharge lamp and a concave reflector, wherein the first end portion of the discharge lamp extends through an opening provided in a center section of the reflector, and wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector.

As explained above with respect to claim 1, Marien neither discloses nor suggests any high pressure discharge lamp assembly including this combination of features.

Therefore, for at least these reasons, Applicant respectfully submits that claim 12 is patentable over Marien. Accordingly, Applicant respectfully requests that the rejection of claim 12 be withdrawn.

(2) Claims 4, 5 and 13 Are Patentable over Marien in view of Kika

Dependent Claims 4 and 5

Claims 4 and 5 depend from claim 1. Applicant respectfully submits that Kika does not remedy the deficiencies of Marien as set forth above with respect to claim 1, and therefore claims 4 and 5 are deemed patentable for at least the reasons set forth above with respect to claim 1. Accordingly, Applicant respectfully requests that the

rejections of claims 4 and 5 be withdrawn.

Independent Claim 13

At the outset, Applicant relies on at least the following standards with regard to proper rejections under 35 U.S.C. § 103(a). First, the Examiner must establish the level of ordinary skill in the art of the invention. M.P.E.P. §§ 2141(II)(C) and 2141.03. Also, a rejection on obviousness grounds under 35 U.S.C. § 103 cannot be sustained by mere conclusory statements: instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also KSR International Co. v. Teleflex Inc., 550 U.S. 398, 82 USPQ2d 1385, 1396 (2007) (quoting Federal Circuit statement with approval). Furthermore, there must be a reasonable expectation of success. *“The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art.”* MPEP § 2143.01(III) (citing KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007)). Finally, the prior art reference (or references when combined) must disclose all of the claim limitations. *“All words in a claim must be considered in judging the patentability of that claim against the prior art.”* MPEP § 2143.03 (citing In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)).

Among other things, the high pressure discharge lamp assembly of claim 13 includes a discharge lamp and a concave reflector, wherein the first end portion of the discharge lamp extends through an opening provided in a center section of the reflector, and wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector.

As explained above with respect to claim 1, Marien neither discloses nor suggests any high pressure discharge lamp assembly including this combination of features.

Kika does not remedy these deficiencies of Marien.

Therefore, for at least these reasons, Applicant respectfully submits that claim 13 is patentable over any possible combination of Marien and Kika.

Furthermore, also among other things, the high pressure discharge lamp

assembly of claim 13 includes a first contact member provided as a first circular conducting strip around the reflector on a surface of the reflector facing away from the discharge lamp, the first contact member being connected to the conduction member; and a second contact member provided as a second circular conducting strip around the reflector on the surface of the reflector facing away from the discharge lamp, the second contact member being connected to the first current-supply conductor.

The Office Action fairly admits that Marien does not disclose these features. However, the Office Action cites Kika for teaching these missing features. Applicant respectfully disagrees.

Kika discloses in FIG. 2A a CAP 16 for a discharge lamp 20 which has two contacts 17a and 17b provided thereon. Contact 17a is connected to a conductor for lamp 20 and contact 17b is connected to a transformer winding 14b.

Neither contact 17a nor contact 17b is provided around a reflector as in the device of claim 13. Applicant sees nothing in either Marien or Kika that teaches that contacts 17a and 17b should be provided on a surface of a reflector facing away from a discharge lamp. If someone attempted to combine the teachings of Marien and Kika, the most that one would produce is a lamp assembly where contacts 17a and 17b are provided on Marien's lamp cap 10. There is nothing Marien, or Kika, or any combination thereof that suggests providing a first contact member provided as a first circular conducting strip around the reflector on a surface of the reflector facing away from the discharge lamp, the first contact member being connected to the conduction member; and a second contact member provided as a second circular conducting strip around the reflector on the surface of the reflector facing away from the discharge lamp, the second contact member being connected to the first current-supply conductor. This is only an idea that apparently could only be obtained through impermissible hindsight reconstruction of Applicant's invention from Applicant's own teachings.

Finally, Applicant respectfully traverse the proposed combination of Marien and Kika as not being supported by any reason with rational underpinnings. The Examiner offers as a reason for the proposed combination that it would allow

Marien's lamp to be arranged in a holder in any rotational position. However, it is apparent that Marien's lamp already may be arranged in a holder in any rotational position. So there apparently would not have been any reason why one of ordinary skill in the art at the time of the invention would have found it obvious to have made the proposed modification of Marien's device.

Accordingly, Applicant respectfully requests that the rejection of claim 13 be withdrawn.

In conclusion, for at least all of the foregoing reasons Applicant respectfully submits that claims 1-6 and 8-13 are all patentable over the cited prior art. Therefore, Applicant respectfully requests that the rejections of claims 1-6 and 8-13 be overturned, that claims 1-6 and 8-13 be allowed, and the application be passed to issue.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Previously Presented) A high-pressure discharge lamp assembly, comprising:

a discharge lamp and a concave reflector arranged around a longitudinal axis, the discharge lamp being closed in a gastight manner and comprising a first end portion and a second end portion and an ionizable gas filling, and in which a pair of electrodes is arranged, wherein the first end portion of the discharge lamp extends through an opening provided in a center section of the reflector,

a first current-supply conductor connected to a first one of the pair of electrodes and issuing to an exterior of the discharge lamp at the first end portion of the discharge lamp;

a second current-supply conductor connected to a second one of the pair of electrodes and issuing to the exterior of the discharge lamp at the second end portion of the discharge lamp,

a conduction member connected to the second current-supply conductor and extending through the opening in the center section of the reflector, and

a contact member provided on a surface of the reflector facing away from the discharge lamp the contact member being connected to the conduction member,

wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector.

2. (Previously Presented) The high-pressure discharge lamp assembly of claim 1, wherein the reflector is provided with a neck portion arranged around the longitudinal axis, the contact member being provided on a surface of the neck portion facing away from the discharge lamp.

3. (Previously Presented) The high-pressure discharge lamp assembly of claim 1, wherein the contact member is provided as a circular conducting strip around the reflector.

4. (Previously Presented) The high-pressure discharge lamp assembly of claim 1, wherein a further contact member is provided on the surface of the reflector, the further contact member being connected to the first current-supply conductor.

5. (Previously Presented) The high-pressure discharge lamp assembly of claim 4, wherein the further contact member is provided as a circular conducting strip around the reflector.

6. (Previously Presented) The high-pressure discharge lamp assembly of claim 2, wherein the neck portion is provided with an opening for passing through the conduction member.

8. (Previously Presented) The high-pressure discharge lamp assembly of claim 2, wherein the neck portion of the reflector is provided with a substantially rotationally symmetrical lamp cap of an insulating material, the lamp cap being provided with the contact member.

9. (Previously Presented) The high-pressure discharge lamp assembly of claim 8, wherein the contact member is provided as a circular conducting strip around the lamp cap.

10. (Previously Presented) The high-pressure discharge lamp assembly of claim 8, wherein the lamp cap is provided with a multiplicity of indents for fixating the contact member.

11. (Previously Presented) The high-pressure discharge lamp assembly of claim 8, wherein a further contact member is provided on the lamp cap on a location where the longitudinal axis intersects the lamp cap.

12. (Previously Presented) A high-pressure discharge lamp assembly, comprising:

a discharge lamp and a concave reflector arranged around a longitudinal axis;
the discharge lamp being closed in a gastight manner and comprising a first end portion and a second end portion and an ionizable gas filling, and in which a pair of electrodes is arranged, wherein the first end portion of the discharge lamp extends through an opening provided in a center section of the reflector;

a first current-supply conductor connected to a first one of the pair of electrodes and issuing to an exterior of the discharge lamp at the first end portion of the discharge lamp;

a second current-supply conductor connected to a second one of the pair of electrodes and issuing to the exterior of the discharge lamp at the second end portion of the discharge lamp;

a conduction member connected to the second current-supply conductor and extending through the opening in the center section of the reflector; and

a contact member provided on a surface of the reflector facing away from the discharge lamp, the contact member being connected to the conduction member,

wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector, and

wherein the conduction member is guided through the fixation means.

13. (Previously Presented) A high-pressure discharge lamp assembly, comprising:

a discharge lamp and a concave reflector arranged around a longitudinal axis;
the discharge lamp being closed in a gastight manner and comprising a first end portion and a second end portion and an ionizable gas filling, and in which a pair of electrodes is arranged, wherein the first end portion of the discharge lamp extends through an opening provided in a center section of the reflector;

a first current-supply conductor connected to a first one of the pair of electrodes and issuing to an exterior of the discharge lamp at the first end portion of the discharge lamp;

a second current-supply conductor connected to a second one of the pair of electrodes and issuing to the exterior of the discharge lamp at the second end portion

of the discharge lamp;

a conduction member connected to the second current-supply conductor and extending through the opening in the center section of the reflector;

a first contact member provided as a first circular conducting strip around the reflector on a surface of the reflector facing away from the discharge lamp, the first contact member being connected to the conduction member; and

a second contact member provided as a second circular conducting strip around the reflector on the surface of the reflector facing away from the discharge lamp, the second contact member being connected to the first current-supply conductor,

wherein the discharge lamp is mounted in a fixation means provided in the opening of the reflector.

EVIDENCE APPENDIX

{None}

RELATED PROCEEDINGS APPENDIX

{None}